SENSE
AMP
180

190

SIN 160

RIN 170

DRAIN BIAS

DBEN

150

DRAIN BIAS

DBEN

DRAIN BIAS
ENABLE
140

SEN
110

TO FLASH ARRAY

EQUALIZE
130

135

REF
120

TO REFERENCE CELL

FIG. 1

255

261

252

258

264

REF. CELL 270

267

249

243

SINR 246

240

234

228

222

SINA 231

DATA 237

EQUALIZE 280

275

FIG. 2

225

216

207

219

213

COLUMN SELECT 210

CELL 204

201

CONCEPTUAL SCHEMATIC OF DRAIN BIAS & EQUALIZATION
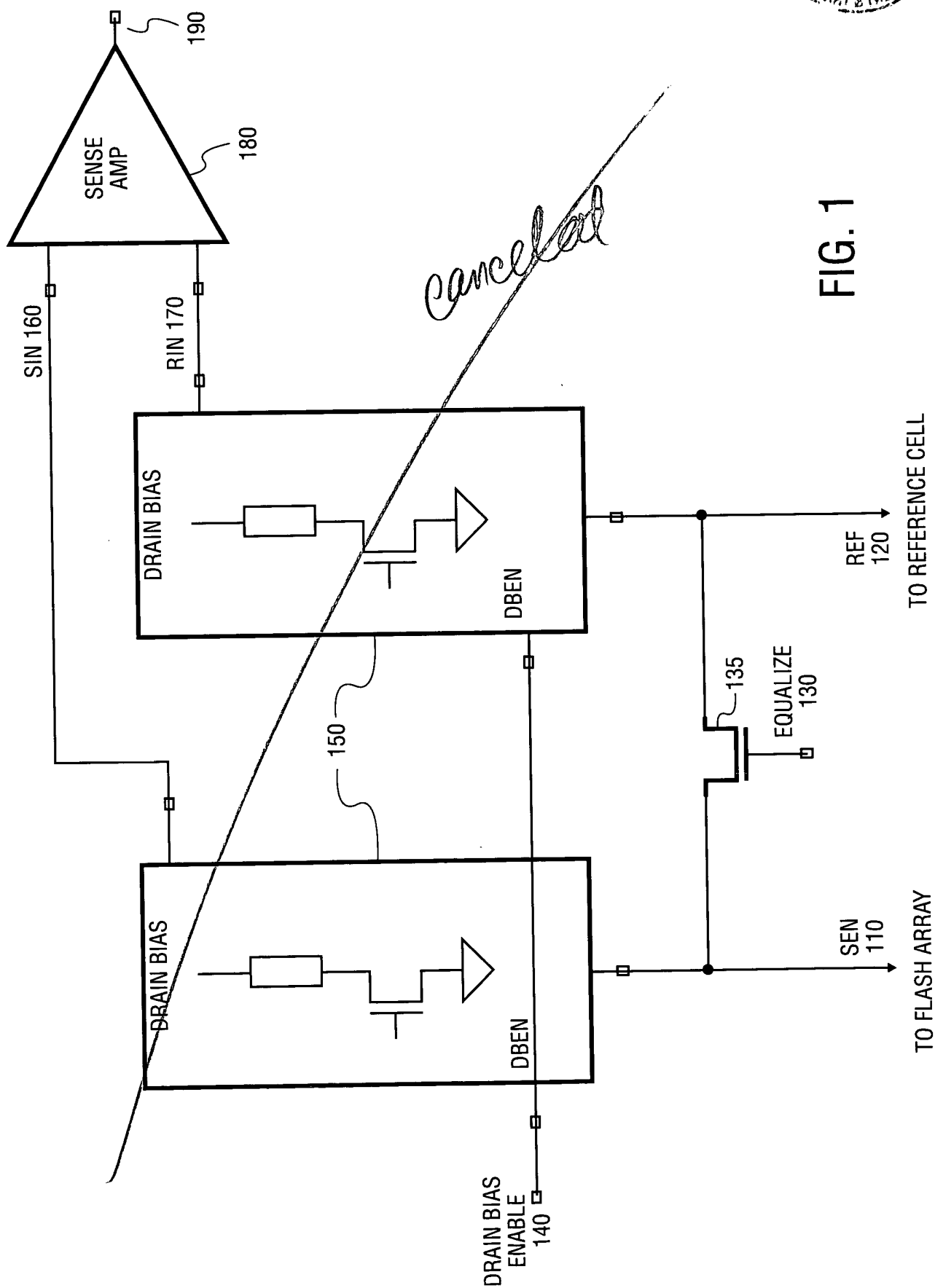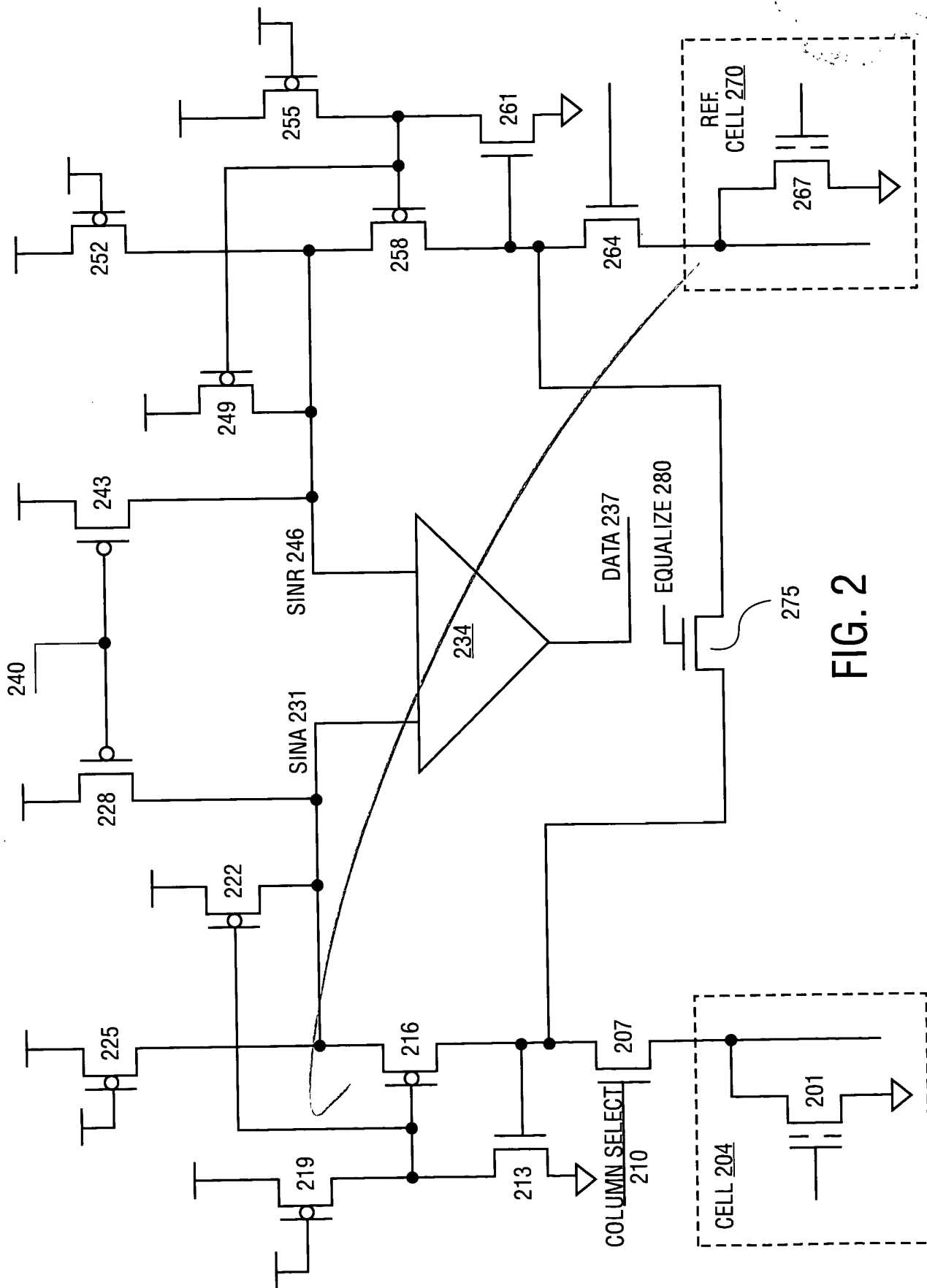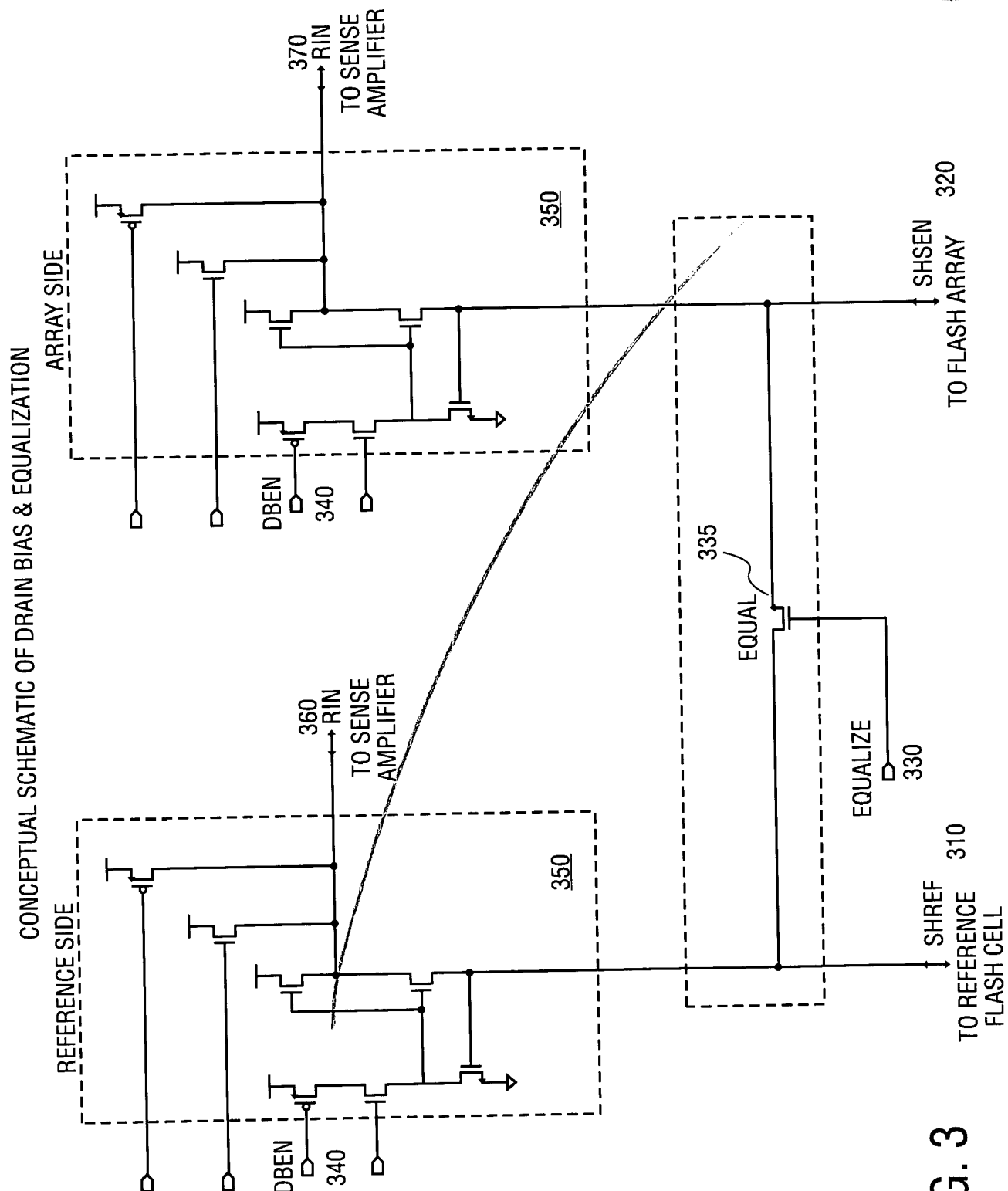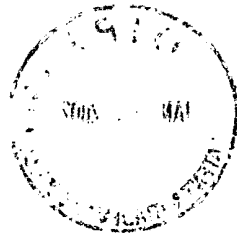
FIG. 3

READ 'ONE' W/O EQ.
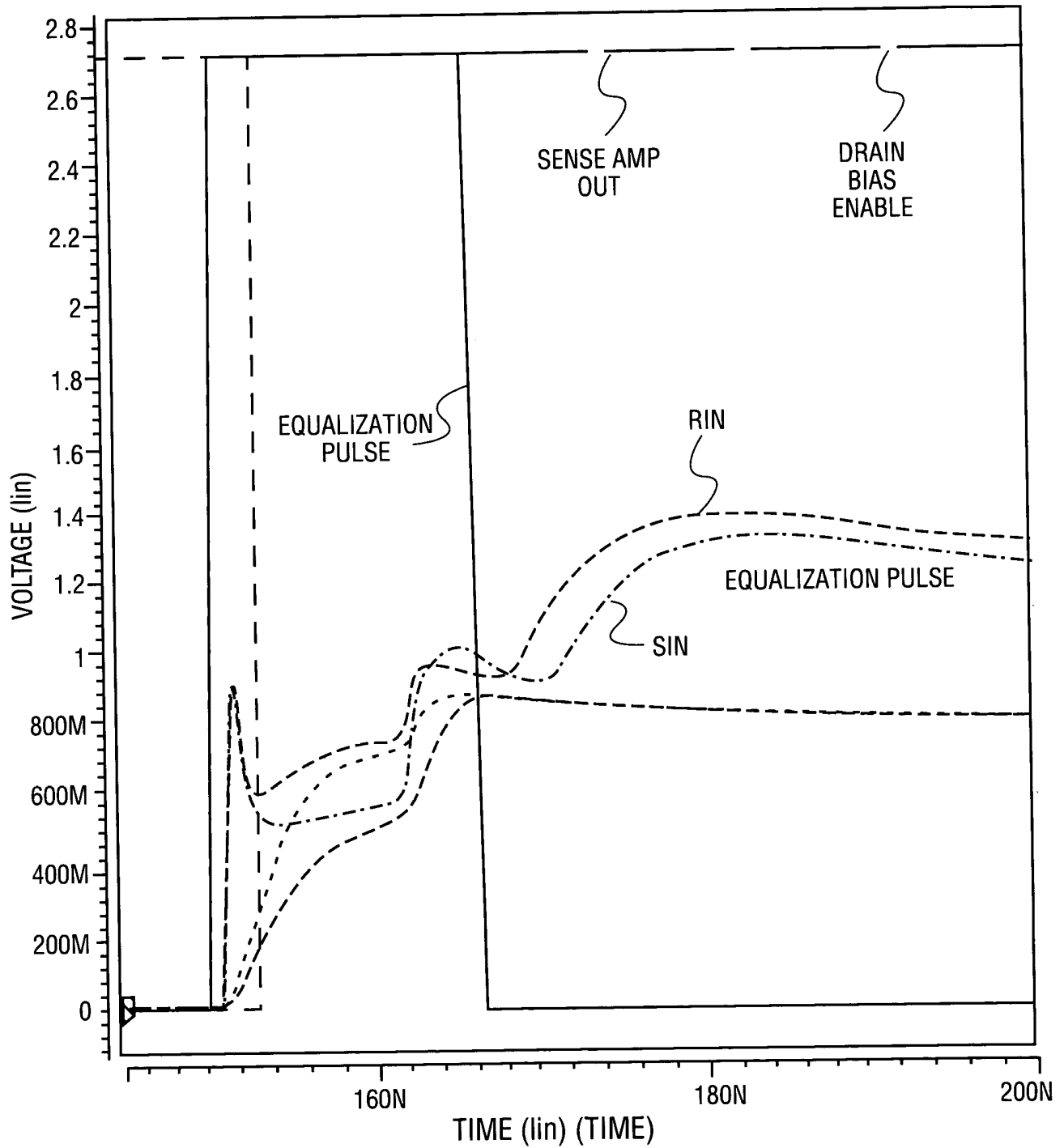

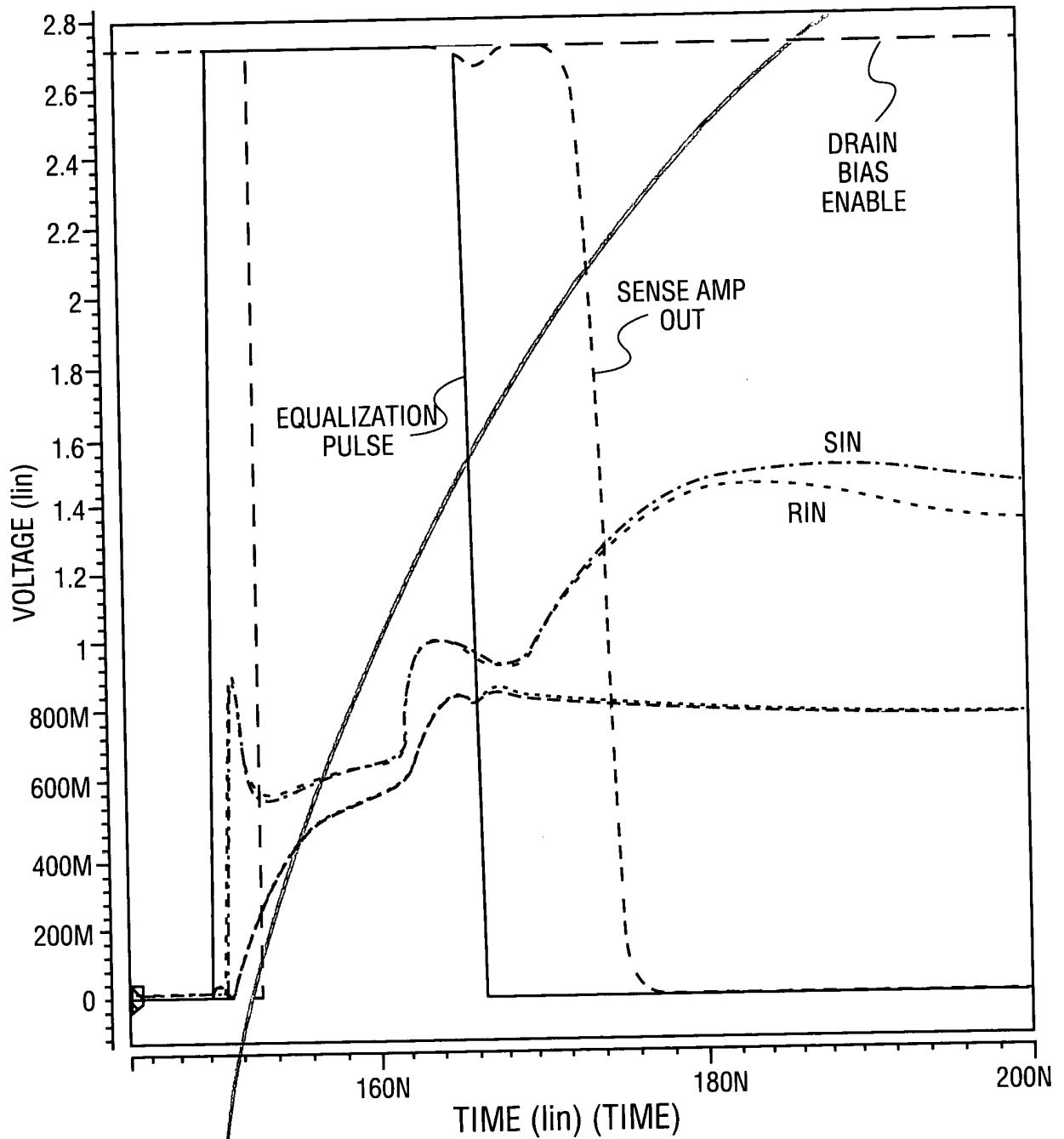FIG. 4A

READ 'ONE' WITH EQ
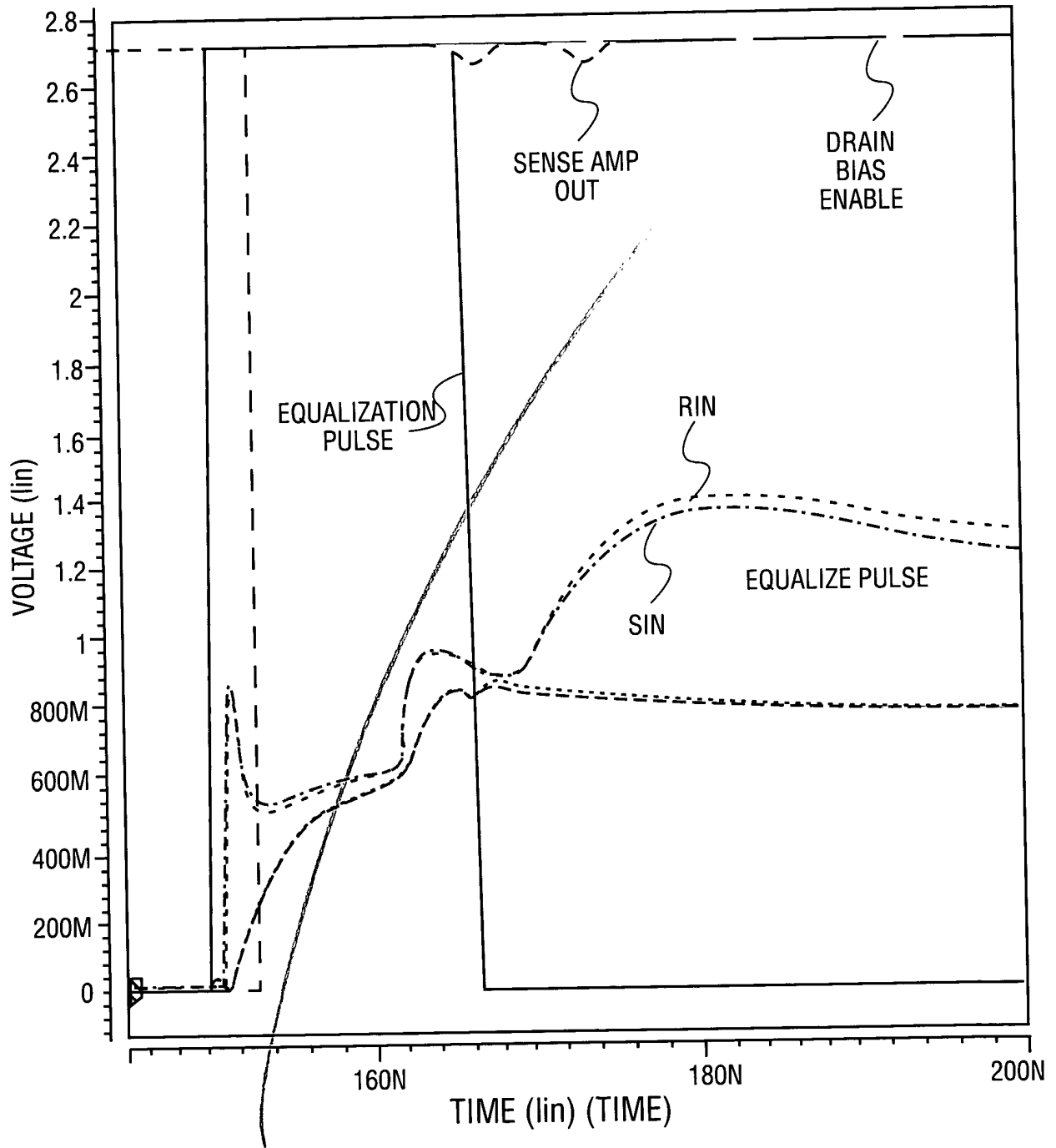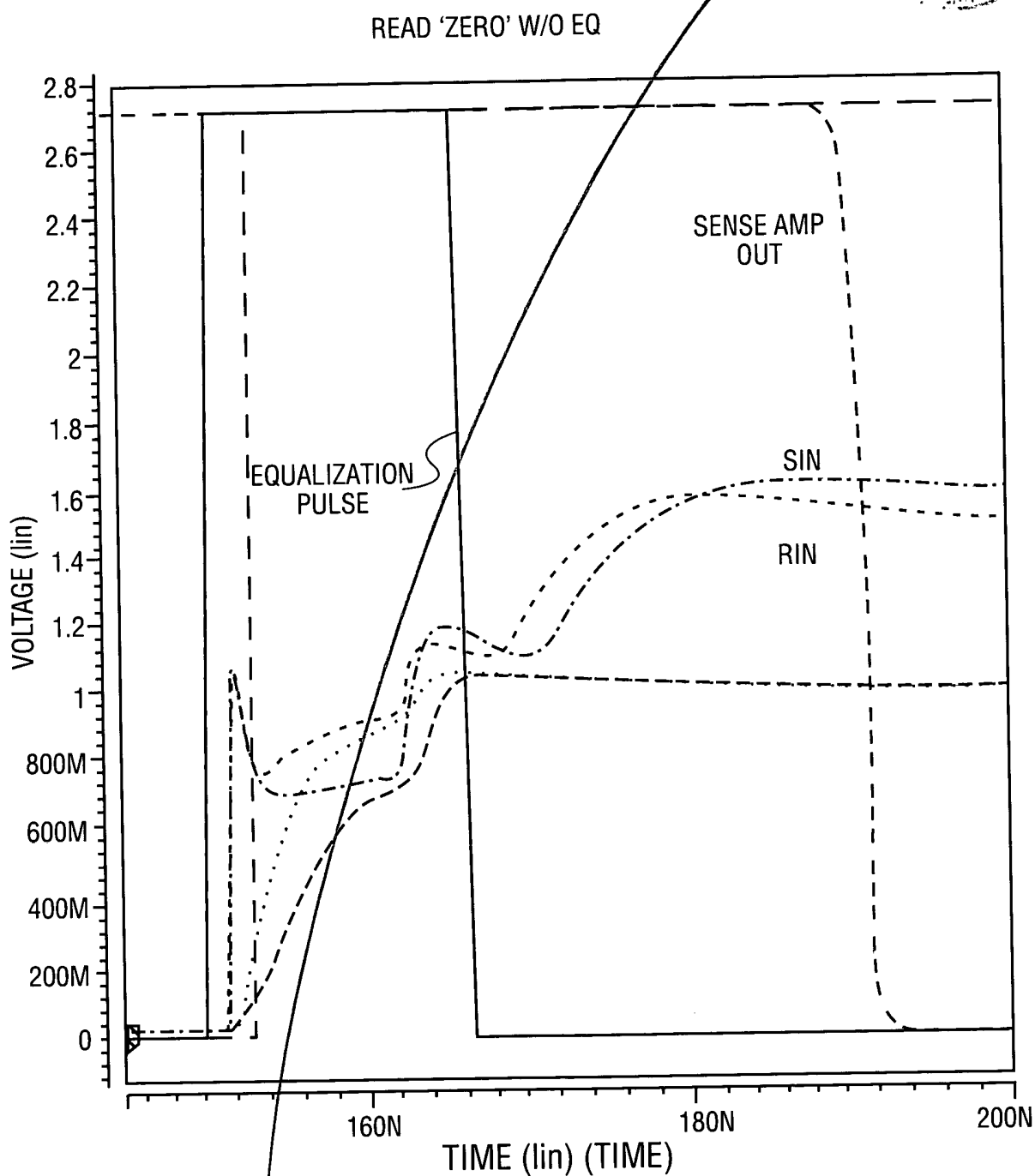

FIG. 4B

READ 'ZERO' WITH EQ

FIG. 4C
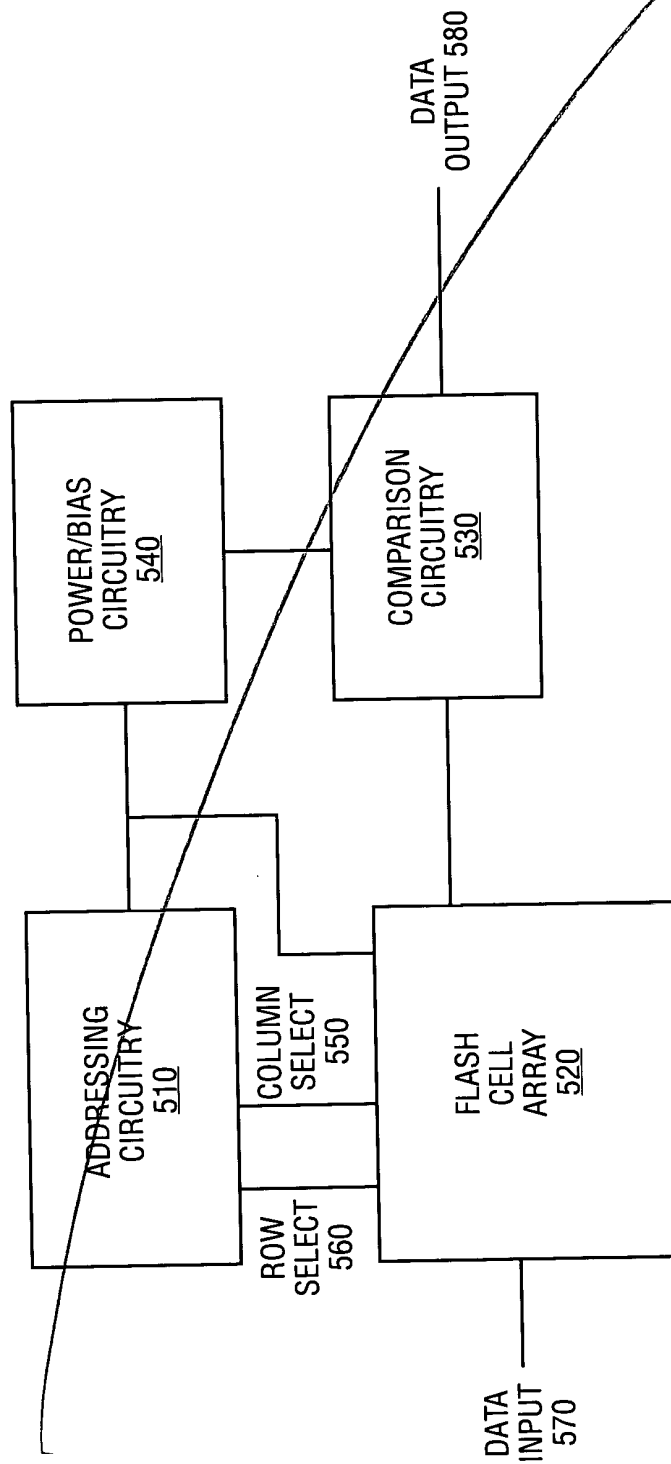
READ 'ZERO' W/O EQ

FIG. 4D

POWER/BIAS
CIRCUITRY
540

COMPARISON
CIRCUITRY
530

DATA
OUTPUT 580

ADDRESSING
CIRCUITRY
510

COLUMN
SELECT
550

FLASH
CELL
ARRAY
520

ROW
SELECT
560

DATA
INPUT
570

FIG. 5

```
┌─────────────────────┐
│     SELECT CELL     │
│         610         │
└─────────────────────┘
           │
┌─────────────────────┐
│       BEGIN         │
│ EQUALIZATION PULSE  │
│         620         │
└─────────────────────┘
           │
┌─────────────────────┐
│   LOAD FLASH CELL   │
│         630         │
└─────────────────────┘
           │
┌─────────────────────┐
│ SUPPLY CURRENT TO CELL │
│         640         │
└─────────────────────┘
           │
┌─────────────────────┐
│ END EQUALIZATION PULSE │
│         650         │
└─────────────────────┘
           │
┌─────────────────────┐
│     SENSE CELL      │
│         660         │
└─────────────────────┘
```

FIG. 6